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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,779	02/05/2002	Bjom Landfeldt	106448.00049	7536
27045	7590	12/22/2005	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			LESNIEWSKI, VICTOR D	
			ART UNIT	PAPER NUMBER
			2152	

DATE MAILED: 12/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/068,779	Applicant(s) LANDFELDT ET AL.	
	Examiner Victor Lesniewski	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 56-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 56-60 is/are rejected.
- 7) ☒ Claim(s) 23 and 60 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 10/14/2005 has been placed of record in the file.
2. Claims 1-11, 14, and 17-23 have been amended.
3. Claims 56-60 have been added.
4. Claims 1-23 and 56-60 are now pending.
5. The applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the following new grounds of rejection.

Response to Amendment

6. Claims have been amended to show a proxy path comprising a plurality of proxies. The amendment proves a change in scope to the independent claims as the independent claims now explicitly state a plurality of proxies being concatenated together to form a proxy chain with an input of each proxy being connected to an output of each preceding proxy. However, none of the amended claims show a patentable distinction over the prior art as evidenced by the following new grounds of rejection.

Claim Objections

7. Claims 23 and 60 are objected to because of the following informalities:
 - Claim 23 makes claim to “the system of Claim 1.” However claim 1 does not recite a system and therefore claim 23 cannot be dependent on claim 1. For the purpose of applying prior art it will be assumed that claim 23 refers to the system of claim 17.
 - Claim 60 appears to have a grammatical deficiency as the claim states “wherein the

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means for performing a proxy operation means for performing...” For the purpose of applying prior art it will be assumed that claim 60 reads similarly to claim 16.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-9, 11, 16-23, 56, 58, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogul (U.S. Patent Number 6,704,798) in view of Knauerhase et al. (U.S. Patent Number 6,345,303), hereinafter referred to as Knauerhase.

10. Mogul disclosed a method for transcoding information returned by a server to a client at a proxy server. In an analogous art, Knauerhase disclosed network proxies for transcoding information that are dynamically chainable.

11. Concerning claims 1 and 17, Mogul did not explicitly state a proxy path that comprises a plurality of proxies being concatenated together to form a proxy chain. However, Knauerhase does disclose this feature as his system allows multiple different proxy processes to be run on a service between a server and client by chaining multiple proxies together between the server and client. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Mogul by adding the ability to use a proxy path that comprises a plurality of proxies being concatenated together to form a proxy chain as provided by

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Knauerhase. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35. This rationale also applies to those dependent claims utilizing the same combination.

12. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a system are rejected under the same rationale applied to the described claim.

13. Thereby, the combination of Mogul and Knauerhase discloses:

- <Claims 1 and 17>

A method of supporting delivery, from a server to an application, of a data stream associated with a service provided by the server, comprising: selecting the server (Mogul, figure 5, item 502); requesting the service provided by the server (Mogul, figure 5, item 502); and automatically and without manual intervention, providing a proxy path between the server and the application for communicating the data stream to the application, wherein the proxy path is a communication path (Mogul, figure 5, item 506) and comprises a plurality of proxies, the plurality of proxies being concatenated together to form a proxy chain with an input of each proxy being connected to an output of each preceding proxy (Knauerhase, column 8, lines 21-27 and 35-53), and performing a proxy operation on the data stream during the delivery of the data stream to the application, wherein the proxy operation processes the data stream according to the characteristics required for communicating with the application (Mogul, figure 5, item 510).

- <Claims 2 and 18>

The method of Claim 1, wherein said proxy path comprises one proxy (Mogul, figure 6, item 614).

- <Claim 3>

The method of Claim 1, wherein said step of providing the proxy path includes configuring the proxy chain to provide the requested service (Mogul, figure 6, item 616).

- <Claim 4>

The method of Claim 3, further comprising the step of configuring the proxy path based on information indicative of at least one of a preference of the application, a characteristic of equipment that will receive the data stream, and a characteristic of the service (Mogul, column 6, lines 56-64 and column 8, lines 18-24 and Knauerhase, column 3, lines 45-48).

- <Claims 5 and 19>

The method of Claim 1, further comprising the steps of sending from the server side to a proxy execution server a request to install the proxy chain in the proxy path, the proxy execution server installing the proxy chain thereon in response to said installation request, and coupling the proxy execution server into the proxy path (Mogul, column 8, line 65 through column 9, line 30 and Knauerhase, column 3, lines 49-64).

- <Claims 6, 20, and 21>

The method of Claim 5, further comprising the steps of the proxy execution server downloading selected proxy modules from proxy repositories (Mogule, figure 6, item 608 and figure 1, item 104) and providing an input network service point, an output network

service point and a proxy cradle, all for handling proxy-to-proxy communication within the proxy chain (Knauerhase, column 8, lines 41-53).

- <Claims 7 and 22>

The method of Claim 6, further comprising the proxy execution server allocating the necessary network service points for the associated proxy chain enabling the proxy chain to listen for connections and wherein the service points are TCP sockets or UDP sockets (Knauerhase, column 7, lines 47-60).

- <Claims 8 and 56>

The method of Claim 1, wherein each of the concatenated proxies are designed as general-purpose proxy service modules and do not require direct communication to the server or the application (Mogul, column 3, line 61 through column 4, line 8).

- <Claims 9 and 23>

The method of Claim 1, wherein said providing step includes sending from the server side of the proxy path to each of a plurality of proxy execution servers a request to install a proxy or concatenated proxy chain from each of the plurality of proxy execution servers in the proxy path (Mogul, column 9, lines 1-14).

Claim 23 also presents limitations discussed in claim 11 below.

- <Claims 11 and 58>

The method of Claim 9, including the proxy execution servers installing the respective proxies or proxy chains thereon in response to the respective installation request (Mogul, column 8, line 65 through column 9, line 30), and the proxy execution servers sending to the server side of the proxy path information that identifies input and output ports to be

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used for coupling the respective proxy execution servers into the proxy path (Knauerhase, column 8, lines 21-27 and 35-53).

- <Claims 16 and 60>

The method of Claim 1, wherein said proxy operation includes one of data compression, data encryption, data transformation, data transcoding and data cacheing (Mogul, column 2, lines 10-14 and column 8, lines 59-64 and Knauerhase, column 3, lines 49-64).

Since the combination of Mogul and Knauerhase discloses all of the above limitations, claims 1-9, 11, 16-23, 56, 58, and 60 are rejected.

14. Claims 10, 12-15, 57, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogul in view of Knauerhase, as applied above, further in view of Smith et al. (U.S. Patent Number 6,377,991), hereinafter referred to as Smith.

15. The combination of Mogul and Knauerhase disclosed a method for transcoding information returned by a server to a client at a proxy server or at a plurality of concatenated proxy servers. In an analogous art, Smith disclosed data retrieval operations between clients and servers that utilize a dynamically changing distributed cache.

16. Concerning claims 10 and 57, the combination of Mogul and Knauerhase did not explicitly disclose sending requests in parallel to the proxy execution servers. However, Smith discloses a proxy server array where communications with each proxy server can occur in parallel. Since the combination of Mogul and Knauerhase discloses sending requests to the proxy servers and Smith provides a structure for communication with proxy servers in parallel, it would have been obvious to one of ordinary skill in the art at the time of the applicant's

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invention to modify the combination of Mogul and Knauerhase by adding the ability to send requests in parallel to the proxy execution servers as provided by Smith. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35.

17. Concerning claims 12-15 and 59, the combination of Mogul and Knauerhase did not discuss a parallel structure for a plurality of proxy servers and therefore did not explicitly disclose parallel proxy installations, parallel communications, and forwarding information from the server side to a plurality of proxy servers in parallel. However, Smith discloses a proxy server array where communications with each proxy server can occur in parallel. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Mogul and Knauerhase by adding the ability to complete parallel proxy installations and parallel proxy server communications as recited in claims 12-15 and 59 as provided by Smith. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35.

18. Thereby, the combination of Mogul, Knauerhase, and Smith discloses:

- <Claims 10 and 57>

The method of Claim 9, wherein said step of sending the request to each of the plurality of proxy execution servers includes sending the requests in parallel (Mogul, column 8, line 65 through column 9, line 30 and Smith, figure 2).

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- <Claims 12 and 59>

The method of Claim 11, wherein said installing step includes the proxy execution servers installing the respective proxies in parallel (Mogul, column 8, line 65 through column 9, line 30 and Smith, figure 2).

- <Claim 13>

The method of Claim 12, wherein said step of sending input and output port information includes the proxy execution servers sending their respective input and output port information to the server side in parallel (Knauerhase, column 8, lines 21-27 and lines 35-53 and column 17, lines 20-35 and Smith, figure 2).

- <Claim 14>

The method of Claim 11, wherein said providing step includes forwarding from the server side of the proxy path to one of the proxy execution servers the input port information that was sent to the server side by another of the proxy execution servers (Knauerhase, column 8, lines 21-27 and lines 35-53 and Smith, column 19, lines 61-67).

- <Claim 15>

The method of Claim 14, wherein said forwarding step includes, for each of the proxy execution servers, forwarding from the server side to the proxy execution server the input port information that was sent by another of the proxy execution servers (Knauerhase, column 8, lines 21-27 and lines 35-53 and Smith, column 19, lines 61-67).

Since the combination of Mogul, Knauerhase, and Smith discloses all of the above limitations, claims 10, 12-15, 57, and 59 are rejected.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

- Earl et al. (U.S. Patent Number 6,112,228) disclosed a method for providing services offered by proxy servers to client computers by chaining proxy servers together and allowing clients to inherit functionality of the proxy topology.
- Yoakum et al. (U.S. Patent Number 6,421,674) disclosed a method for implementing a real-time, distributed, hierarchical database using a proxiability protocol and a chain of proxy servers.
- Kocherlakota (U.S. Patent Number 6,785,705) disclosed a method of establishing Internet communication from a user to a server through a plurality of chained proxy servers.

20. The applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). The applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987.

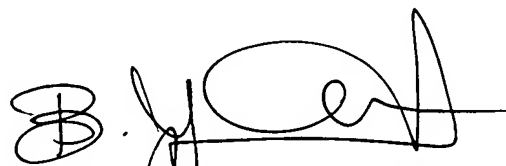
The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Victor Lesniewski
Patent Examiner
Group Art Unit 2152



BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER